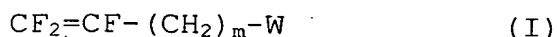


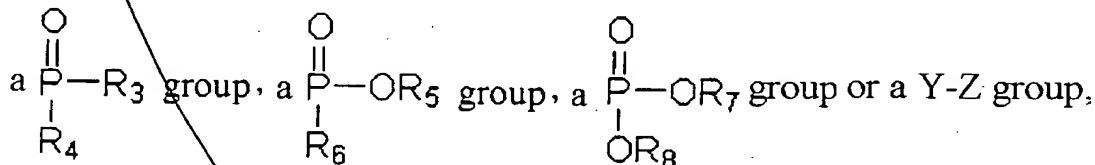
CLAIMS

1. Compound corresponding to the formula I



in which

5 m (has the value 1, 2 or 3,
W represents a $\text{CH}(\text{OH})\text{CH}_2\text{OH}$ group, a $\text{P}-\text{R}_1$ group,
 R_2



in which

10 R_1 , R_2 , R_3 and R_4 independently represent a hydrogen atom, a $\text{C}_1\text{-C}_{20}$ alkyl group or an optionally substituted aryl group

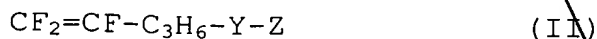
R_5 and R_6 independently represent a hydrogen atom, a $\text{C}_1\text{-C}_{20}$ alkyl group or an optionally substituted aryl group, with the proviso that, when R_5 represents a hydrogen atom, R_6 is other than a phenyl group when m has the value 1

15 R_7 and R_8 independently represent a hydrogen atom, a $\text{C}_1\text{-C}_{20}$ alkyl group or an optionally substituted aryl group, with the proviso that R_7 and R_8 do not both represent a hydrogen atom or an ethyl group when m has the value 1

Y represents an oxygen atom or a sulphur atom and
Z represents a hydrogen atom, a $\text{CH}_2\text{CH}_2\text{OH}$ group, a
25 CH_2COOH group or a COCH_3 group,

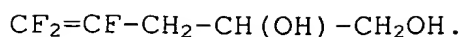
with the proviso that, when W represents $\text{CH}(\text{OH})\text{CH}_2\text{OH}$, m has the value 1, when Y represents an oxygen atom, Z is not a hydrogen atom and, when Y represents S, m has the value 3.

30 2. Compound according to Claim 1, corresponding to the formula II

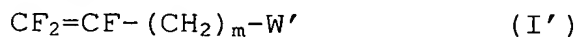


in which Y and Z are as defined in Claim 1.

3. Compound according to Claim 1, corresponding to
35 the formula



4. Copolymerization process comprising the reaction of a compound corresponding to the formula I'



5 in which

m has the value 1, 2 or 3,

W' represents a $\text{CH}(\text{OH})\text{CH}_2\text{OH}$ group, a $\text{CH}=\text{CH}_2$ group,

a $\text{CH}-\text{CH}_2$ group, a $\text{P}-\text{R}_1$ group, a $\text{P}-\text{R}_3$ group,

$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}-\text{CH}_2 \\ | \quad | \\ \text{O} \end{array}$ $\begin{array}{c} \text{P}-\text{R}_1 \\ | \\ \text{R}_2 \end{array}$ $\begin{array}{c} \text{O} \\ \parallel \\ \text{P}-\text{R}_3 \\ | \\ \text{R}_4 \end{array}$

a $\text{P}-\text{OR}_5$ group, a $\text{P}-\text{OR}_7$ group or a Y-Z' group,

$\begin{array}{c} \text{O} \\ \parallel \\ \text{P}-\text{OR}_5 \\ | \\ \text{R}_6 \end{array}$ $\begin{array}{c} \text{O} \\ \parallel \\ \text{P}-\text{OR}_7 \\ | \\ \text{OR}_8 \end{array}$

in which

10 $\text{R}_1, \text{R}_2, \text{R}_3, \text{R}_4, \text{R}_5, \text{R}_6, \text{R}_7$ and R_8 independently represent a hydrogen atom, a C_1-C_{20} alkyl group or an optionally substituted aryl group

Y represents an oxygen atom or a sulphur atom and

Z' represents a hydrogen atom, a $\text{CH}_2\text{CH}_2\text{OH}$ group, a CH_2COOH group or a COCH_3 group,

15 with a compound corresponding to the formula III



in which

20 X independently represents a hydrogen atom or a fluorine atom

with the proviso that, when m has the value 1 and X represents a hydrogen atom, W' does not represent a $\text{CH}-\text{CH}_2$ group,

$\begin{array}{c} \text{CH}-\text{CH}_2 \\ | \quad | \\ \text{O} \end{array}$

so as to obtain a fluorocopolymer.

25 5. Copolymerization process according to Claim 4, comprising the reaction of a compound corresponding to the formula I'

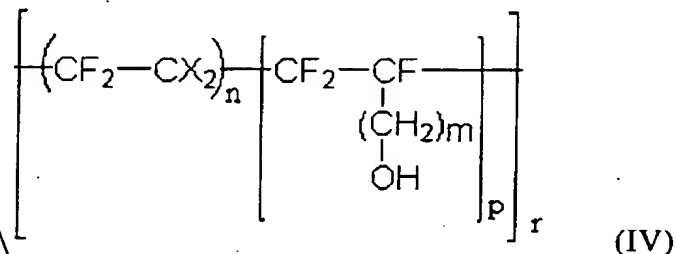
in which

m has the value 1, 2 or 3,

30 W' represents Y-Z' and Y represents an oxygen atom and Z' represents a hydrogen atom

with a compound corresponding to the formula III
in which X independently represents a hydrogen atom or
a fluorine atom

so as to obtain a copolymer corresponding to the
5 formula IV



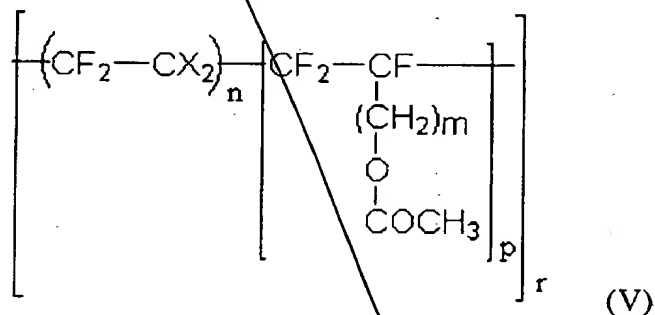
n, p and r independently representing natural integers.

6. Copolymerization process according to Claim 4,
comprising the reaction of a compound corresponding to
10 the formula I'
in which

m has the value 1, 2 or 3,

W' represents Y-Z' and Y represents an oxygen atom
and Z' represents a COCH₃ group

15 with a compound corresponding to the formula III
in which X independently represents a hydrogen atom or
a fluorine atom
so as to obtain a copolymer corresponding to the
formula V



20 n, p and r independently representing natural integers.

7. Copolymerization process according to Claim 4,
comprising the reaction of a compound corresponding to
the formula I'

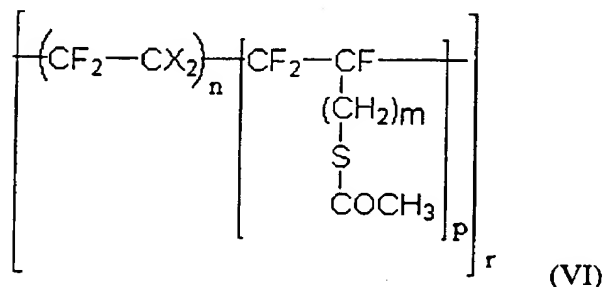
25 in which

m has the value 1, 2 or 3,

W' represents Y-Z' and Y represents a sulphur atom
and Z' represents a COCH₃ group

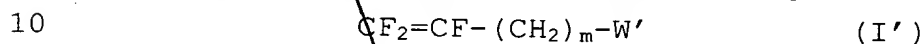
with a compound corresponding to the formula III
in which X independently represents a hydrogen atom or
a fluorine atom

so as to obtain a copolymer corresponding to the
5 formula VI



n, p and r independently representing natural integers.

8. Copolymerization process comprising the
reaction of a compound corresponding to the formula I'



in which

m has the value 1, 2 or 3,

W' represents a CH(OH)CH₂OH group, a CH=CH₂ group,

a $\text{CH}-\text{CH}_2$ group, a $\text{P}-\text{R}_1$ group, a $\text{P}-\text{R}_3$ group,

a $\text{P}-\text{OR}_5$ group, a $\text{P}-\text{OR}_7$ group or a Y-Z' group,

15 in which

R₁, R₂, R₃, R₄, R₅, R₆, R₇ and R₈ independently represent
a hydrogen atom, a C₁-C₂₀ alkyl group or
an optionally substituted aryl group

Y represents an oxygen atom or a sulphur atom and

20 Z' represents a hydrogen atom, a CH₂CH₂OH group, a
CH₂COOH group or a COCH₃ group,

with a compound corresponding to the formula III



in which

25 X independently represents a hydrogen atom or a
fluorine atom

and with an olefinic compound so as to obtain a copolymer.

9. Copolymerization process according to Claim 8, comprising the reaction of a compound corresponding to the formula I'

in which

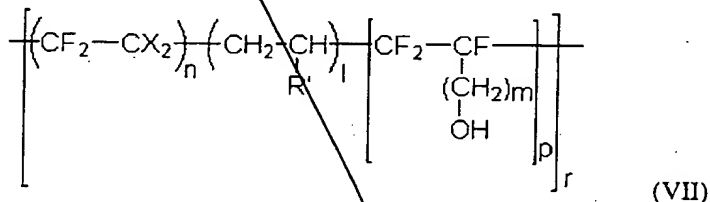
m has the value 1, 2 or 3,

W' represents Y-Z' and Y represents an oxygen atom and Z' represents a hydrogen atom

10 with a compound corresponding to the formula III in which X independently represents a hydrogen atom or a fluorine atom

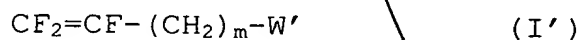
and with an olefinic compound of formula $\text{CH}_2=\text{CH}-\text{R}'$ in which R' represents a hydrogen atom or a C₁-C₄ alkyl group

so as to obtain a copolymer corresponding to the formula VII



1, n, p and r independently representing natural integers.

10. Use of compounds corresponding to the formula I'



in which

m has the value 1, 2 or 3,

W' represents a $\text{CH}(\text{OH})\text{CH}_2\text{OH}$ group, a $\text{CH}=\text{CH}_2$ group,

a $\text{CH}-\text{CH}_2$ group, a $\text{P}-\text{R}_1$ group, a $\text{P}-\text{R}_3$ group,

a $\text{P}-\text{OR}_5$ group, a $\text{P}-\text{OR}_7$ group or a Y-Z' group,

in which

R₁, R₂, R₃, R₄, R₅, R₆, R₇ and R₈ independently represent a hydrogen atom, a C₁-C₂₀ alkyl group or an optionally substituted aryl group

Y represents an oxygen atom or a sulphur atom and

5 Z' represents a hydrogen atom, a CH₂CH₂OH group, a CH₂COOH group or a COCH₃ group,

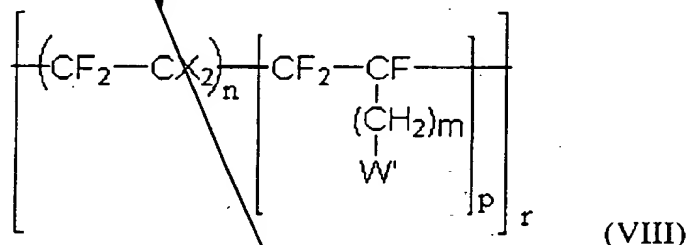
with a compound corresponding to the formula III



10 in which X independently represents a hydrogen atom or a fluorine atom, preferably a hydrogen atom and optionally with an olefinic compound, to form fluoroelastomers.

11. Use according to Claim 10, in which the olefinic compound is propylene.

15 12. Copolymer corresponding to the general formula VIII



in which

m has the value 1, 2 or 3,

20 X independently represents a hydrogen atom or a fluorine atom,

n, p and r independently represent natural integers, and

W' represents a CH(OH)CH₂OH group, a CH=CH₂ group,

a $\text{CH}-\text{CH}_2$ group, a $\text{P}-\text{R}_1$ group, a $\text{P}-\text{R}_3$ group,

a $\text{P}-\text{OR}_5$ group, a $\text{P}-\text{OR}_7$ group or a Y-Z' group,

25

in which

R₁, R₂, R₃, R₄, R₅, R₆, R₇ and R₈ independently represent a hydrogen atom, a C₁-C₂₀ alkyl group or an optionally substituted aryl group

Y represents an oxygen atom or a sulphur atom and

5 Z' represents a hydrogen atom, a CH₂CH₂OH group, a CH₂COOH group or a COCH₃ group.

13. Copolymer according to Claim 12, in which

m has the value 1, 2 or 3,

10 X independently represents a hydrogen atom or a fluorine atom, and

W' represents a Y-Z' group,

in which

Y represents an oxygen atom and

Z' represents a hydrogen atom.

15 14. Copolymer according to Claim 12, in which

m has the value 1, 2 or 3,

X independently represents a hydrogen atom or a fluorine atom, and

W' represents a Y-Z' group,

20 in which

Y represents an oxygen atom and

Z' represents a COCH₃ group.

15. Copolymer according to Claim 12, in which

m has the value 1, 2 or 3,

25 X independently represents a hydrogen atom or a fluorine atom, and

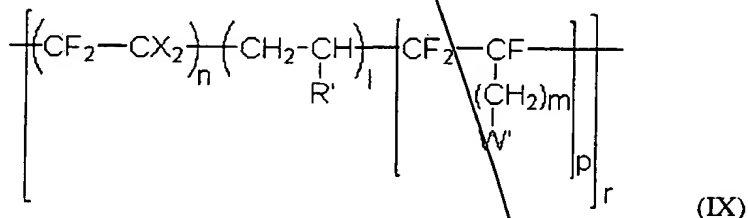
W' represents a Y-Z' group,

in which

Y represents a sulphur atom and

30 Z' represents a COCH₃ group.

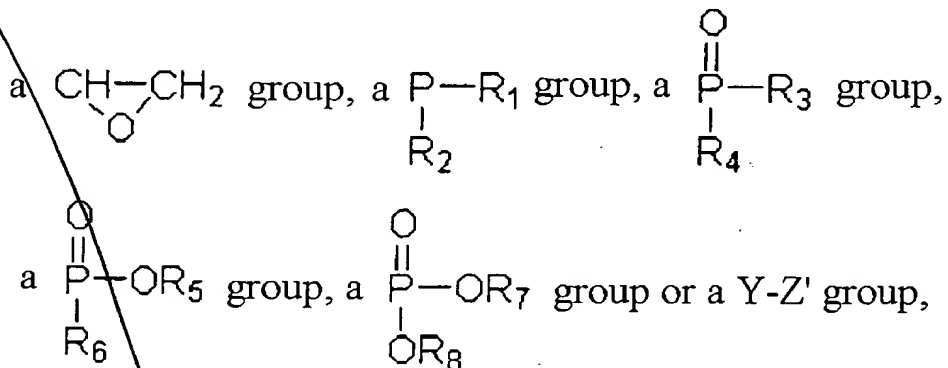
16. Copolymer corresponding to the general formula IX



in which

35 m has the value 1, 2 or 3,

- X independently represents a hydrogen atom or a fluorine atom,
 1, n, p and r independently represent natural integers,
 R' represents a hydrogen atom or a C₁-C₄ alkyl group and
 5 W' represents a CH(OH)CH₂OH group, a CH=CH₂ group,



in which

- R₁, R₂, R₃, R₄, R₅, R₆, R₇ and R₈ independently represent
 a hydrogen atom, a C₁-C₂₀ alkyl group or
 10 an optionally substituted aryl group
 Y represents an oxygen atom or a sulphur atom and
 Z' represents a hydrogen atom, a CH₂CH₂OH group, a
 CH₂COOH group or a COCH₃ group.
 17. Copolymer according to Claim 16, in which
 15 m has the value 1, 2 or 3,
 X independently represents a hydrogen atom or a
 fluorine atom,
 W' represents Y-Z' and Y represents an oxygen atom
 and Z' represents a hydrogen atom
 20 1, n, p and r independently represent natural integers
 and R' represents a hydrogen atom or a C₁-C₄ alkyl
 group.
 18. Crosslinking process comprising the stages of
 a) optional deprotection of the functional groups of
 25 copolymers according to one or more of Claims 12
 to 17,
 b) reaction of the resulting copolymers with an
 unconjugated C₅-C₈ diene,
 so as to obtain crosslinked copolymers.
 30 19. Process according to Claim 18, in which the
 unconjugated diene is 1,5-hexadiene,

ADP A₁ >